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Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

☐ Declaration Submitted with Initial Filing **OR** ☒ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

**Attorney Docket Number** 555255012607

**First Named Inventor** YACH, David P.

**COMPLETE IF KNOWN**

**Application Number** 10 / 689,901

**Filing Date** 21 October 2003

**Group Art Unit**

**Examiner Name**

**As a below named inventor, I hereby declare that:**

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHODS AND APPARATUS FOR LEXICOGRAPHICALLY SORTING CYCLIC DATA**

*(Title of the Invention)*

the specification of which

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) 10/21/2003 as United States Application Number or PCT International

Application Number 10/689,901 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

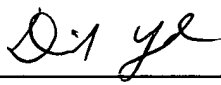
☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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**DECLARATION — Utility or Design Patent Application**

Direct all correspondence to: <input type="checkbox"/>		Customer Number or Bar Code Label <input style="width: 100px;" type="text"/>		OR <input checked="" type="checkbox"/> Correspondence address below	
<b>David B. Cochran, Esq.</b>					
Name					
JONES DAY					
Address North Point, 901 Lakeside Avenue					
Cleveland			Ohio		44114-1190
City			State		ZIP
USA		(216) 586-3939		(216) 579-0212	
Country		Telephone		Fax	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.					
NAME OF SOLE OR FIRST INVENTOR :			<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name <b>David P.</b> (first and middle [if any])			Family Name <b>YACH</b> or Surname		
Inventor's Signature 				Date <b>Oct 22, 2003</b>	
Residence: City <b>Waterloo</b>		State <b>Ontario</b>		Country <b>CANADA</b>	
City		State		Country	
Mailing Address <b>295 Phillip Street</b>					
Waterloo		Ontario		CANADA	
City		State		Country	
ZIP <b>N2L 3W8</b>					
NAME OF SECOND INVENTOR:			<input type="checkbox"/> A petition has been filed for this unsigned inventor		
Given Name (first and middle [if any])			Family Name or Surname		
Inventor's Signature				Date	
Residence: City		State		Country	
City		State		Country	
ZIP		Citizenship			
Mailing Address					
City		State		Country	
ZIP					
<input type="checkbox"/> Additional inventors are being named on the ____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.					



Please type a plus sign (+) inside this box → ☐

PTO/SB/81 (02-01)

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## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	10/689,901
Filing Date	21 October 2003
First Named Inventor	David Yach
Title	METHODS AND APPARATUS FOR
Group Art Unit	
Examiner Name	
Attorney Docket Number	555255-012-607

I hereby appoint:

☐ Practitioners at Customer Number

OR

☒ Practitioner(s) named below:

Name	Registration Number
Krishna K. Pathiyal, Esq.	44435
Robert C. Liang, Esq.	48091
***Please see attached sheet***	

Place Customer  
Number Bar Code  
Label here

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number

OR

Place Customer  
Number Bar Code  
Label here

<input checked="" type="checkbox"/> Firm or Individual Name	David B. Cochran, Esq.				
Address	JONES DAY				
Address	North Point, 901 Lakeside Avenue				
City	Cleveland	State	Ohio	Zip	44114
Country	USA				
Telephone	(216) 586-3939	Fax	(216) 579-0212		

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

### SIGNATURE of Applicant or Assignee of Record

Name	Mihal Lazaridis, President and Co-CEO, on behalf of Research In Motion Limited
Signature	
Date	4 Dec 2003

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted. (PTO/SB/81 (02-01) and \*Supplemental Page Listing Additional Agents of Record)

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: David P. YachApplication No./Patent No.: 10/689,901 Filed/Issue Date: 10/21/2003Entitled: METHODS AND APPARATUS FOR LEXICOGRAPHICALLY SORTING CYCLIC DATA

Research In Motion Limited, a corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or2. ☐ an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.☐ Additional documents in the chain of title are listed on a supplemental sheet.☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

3/25/04  
Date216-586-3939

Telephone number

David B. Cochran

Typed or printed name

David Cochran  
SignatureAttorney (Agent) for Assignee

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## **ASSIGNMENT**

WHEREAS, new and useful improvements have been made by the undersigned in

### **SYSTEM AND METHOD OF LEXICOGRAPHICALLY SORTING CYCLIC DATA**

and are the subject of a provisional patent application prepared for filing in the United States Patent and Trademark Office, and executed by the undersigned on the dates indicated below in the appropriate spaces to the right of the signatures of the undersigned, which application is further identified as Docket No. PUS-0460.

WHEREAS, RESEARCH IN MOTION LIMITED, a corporation organized under the laws of the Province of Ontario, CANADA, having a place of business at 295 Phillip Street, Waterloo, Ontario, CANADA N2L 3W8, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants Research In Motion Limited or any of its authorized representatives the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

David P. Yach  
David P. Yach  
254 Castlefield Ave  
Waterloo, Ontario  
N2K 2N1  
CANADA

Date: Oct 22, 2003

STATEMENT BY WITNESS

I, Sammy MacFarlane, whose full Post Office address is

533 Cairncroft Place, Waterloo, Ont N2T 2J5  
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be the person named in the assignment, duly sign and execute the same.

Sammy MacFarlane  
(Signature of Witness)

Date: Oct. 22, 2003